

Proposed Revisions to Credit Requirements for Virtual Transactions

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For Discussion Only

Overview

- ◆ An undercapitalized Customer can create a substantial risk of loss to the market.
- ◆ Certain market scenarios are not adequately addressed by current rules.
- ◆ Following FERC's latest reduction of credit requirements for Virtual Transactions in 2005, the NYISO has experienced one nonpayment default associated with Virtual Transactions.
- ◆ NYISO staff has identified ways to mitigate this risk.
- ◆ However, even with tariff changes, no reasonable level of credit can completely protect the NYISO and its Customers from trading losses that may be incurred in extraordinary circumstances.

Current Credit Requirements

- ◆ Credit requirements for Virtual Transactions are established in the tariffs.
- ◆ Credit Requirement Calculation:
 $(\text{Daily Trading Limit in MWhs}) \times (\text{Price per MWH}) \times (\text{Factor of 2})$
- ◆ Daily Trading Limit is indicated by the customer, subject to availability of adequate credit.
- ◆ Price per MWh is determined based on the difference between the Day-Ahead and Real-Time energy prices over the previous ninety days at the 97th percentile.

Example:

Customer A desires to trade 1,000 MWhs daily.

Credit requirement (as of 10/01/2006) = $1,000 \text{ MWhs} \times \$189 \times 2 = \$378,000$

Identified Problems

- ◆ Virtual Traders can incur market losses that exceed collateral, generally due to unexpected market events.
- ◆ For a thinly-capitalized Virtual Trader, the risk that a market loss exceeding its credit will result in a bad debt loss is much higher than for well-capitalized Virtual Traders.
- ◆ The 90-day rolling calculation of the price differential used to establish Virtual Transactions credit requirements lags behind seasonal changes (i.e., the price per MWh can be higher than necessary in shoulder periods and lower than necessary in peak periods).
- ◆ The time period to remove the bidding privileges of a Virtual Trader who has exceeded its established credit is too long.
- ◆ Statistically, trading Virtual Supply is more risky than trading Virtual Load. This fact is not reflected in the current credit requirements.

Proposed Solutions

- ◆ NYISO staff recommends creating two categories of Virtual Traders with different credit requirements for each.

Category 1 would be subject to the credit requirements as they are currently structured under the NYISO tariffs and be defined using either of the two standards below:

- A Customer that qualifies for unsecured credit per the tariffs.
- A Customer that is a net seller across all NYISO-administered markets whose average monthly net sales to the NYISO for a 12-month rolling period is at least \$10 million and that is not a net payor during any month in this period.

Category 2 will be those customers that do not qualify as Category 1 and will be subject to new, more conservative credit requirement as follows:

- The price differential will be calculated at the 99th percentile, rather than the current 97th percentile.
- These Virtual Traders will only be allowed to trade 50% of their established trading limit.

Proposed Solutions - Continued

- ◆ In addition, NYISO staff recommends the following changes to be applicable to all Virtual Traders:
 - 90-day rolling calculation of the price differential will be reduced to 30-days.
 - Suspension timeframes for Customers that have eroded available credit support will be shortened. The steps to shorten the timeframe will be discussed later in the presentation.
 - Finally, NYISO staff will analyze Virtual Supply versus Virtual Load bidding behavior and risk profiles for potential future refinements to the credit requirements.

Impact Of Proposed Changes On Customers

Assuming No Change in the Currently-Authorized MWh Trading Limits

Attributes as of 10/01/2006	Category 1 - Current 97 th – 90-day rolling (\$189 x 2)	Category 2 -Current 97 th – 90 day rolling (\$189 x 2)	Category 1 -Proposed 97 th – 30-day rolling (\$53 x 2)	Category 2 - Proposed 99 th – 30 day rolling (\$85 x 2)
Number of MPs	43 (50%)	43 (50%)	43 (50%)	43 (40%)
Number of Authorized MWhs Number of Authorized MWhs (%)	389,955 MWhs 82%	84,915 MWhs 18%	389,955 MWhs 82%	84,915 MWhs** 18%
Credit Calculation = Credit Requirement (\$)	389,995 MWhs x \$189 x 2 = \$147 million	84,915 MWhs x \$189 x 2 = \$32 million	389,995 MWhs x \$53 x 2 = \$41 million	84,915 MWhs x \$85 x 2 = \$14 million
Trading Range Credit Requirement	400 MWhs – 50,000 MWhs \$151,200 - \$18,900,000	16 MWhs – 25,000 MWhs \$6,048 - \$9,450,000	400 MWhs – 50,000 MWhs \$42,400 - \$5,300,000	16 MWhs – 25,000 MWhs \$2,720 - \$4,250,000

**** Virtual Traders in Category 2 will only be allowed to trade 50% of their established trading limit. As such, the maximum trading limit in this example is 42,458 MWhs.**

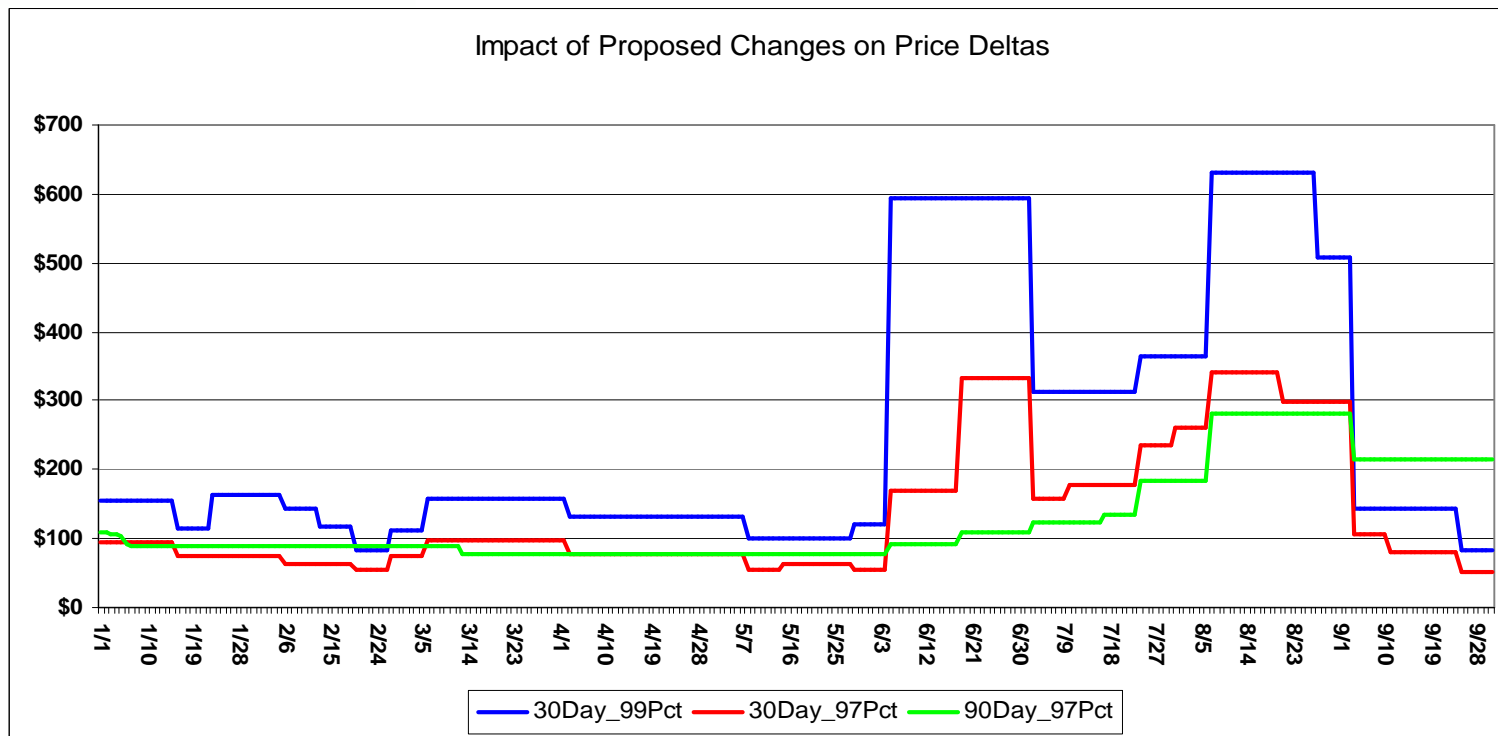
Impact Of Proposed Changes On Price Deltas

Comparison of Price Deltas Under Historic Prices

Date	CURRENT METHOD	PROPOSED METHOD	
	All MPs 97 th – 90-day rolling	Category 1 97 th – 30-day rolling	Category 2 99 th – 30-day rolling
5-30-2006	\$76	\$85	\$129
06-05-2006	\$93	\$160	\$593
06-19-2006	\$109	\$323	\$593
07-03-2006	\$122	\$323	\$593
07-23-2006	\$185	\$220	\$327
08-06-2006	\$282	\$343	\$631
09-04-2006	\$214	\$107	\$144
10-01-2006	\$189	\$53	\$85

Impact Of Proposed Changes On Price Deltas

Comparison of Price Deltas Under Historic Prices



Pro Forma Example of Impact of Proposed Changes On a Customer with Trading Losses

- ◆ 50% Trading Limit would cut trading volume in half, reducing \$402k trading loss to \$201k trading loss.
- ◆ Combination of changing to 99th percentile and to measurement period of 30-day rolling average would increase the collateral requirement by about 70% to approximately **\$377K**.
- ◆ Thus, under the proposed changes, this trading loss would be **\$201K**, required collateral would be **\$377K**, and no bad debt loss would occur, as collateral/loss = **1.88X**.

Shortened Suspension Timeframes

Current Monitoring Action

- ♦ The NYISO Credit Department monitors daily (including weekends and holidays) the cumulative financial position versus established credit support, for all Customers participating in the Virtual Transactions market.
- ♦ When a Customer has cumulative month-to-date virtual trading losses greater than or equal to 50% of the amount of credit required, the Credit Department will make a demand for additional credit support or prepayment in an amount equal to the entire trading loss. This demand must be met no later than close of the next business day.
- ♦ If the Customer does not comply, its trading privileges will be suspended until such time Customer complies.

Current Suspension Timeframe

- ♦ If the trading loss is observed any day between Sunday and Thursday, a demand for credit support may be issued and can potentially be met during the next business day (i.e., anytime between Monday and Friday). If the demand is not met, NYISO will suspend trading privileges.
- ♦ If the trading loss is observed on Friday or Saturday, the earliest day a Customer can comply is Monday, which allows a trader to enter two additional days of bids and offers. If Monday is a holiday, then a trader can enter three additional days of bids and offers.

Problem

- ♦ Because the current policy requires the NYISO to provide one business day to comply, up to three additional days (including a Monday holiday) of trading activity can occur, for which the Customer's net loss position could further deteriorate.

Proposal

- ♦ If the NYISO observes cumulative virtual trading losses on Friday, Saturday or Sunday (if following Monday is a holiday), greater than or equal to 50% of the amount of credit support posted, then the Credit Department will issue a demand for credit support and suspend trading privileges immediately, until such time as the Customer complies.
- ♦ NYISO will institute a reporting mechanism that allows the Credit Department to determine a Customer's Virtual Transactions financial settlement prior to 5 a.m. the day after the operating day. If a Customer exceeds its established credit support by 100%, the Credit Manager will have the authority to remove any pending day-ahead bids before they are accepted for evaluation at 5 a.m. and suspend trading privileges until the Customer complies with demand for credit support.

Recommendations/Next Steps

- ◆ Schedule & Pricing Working Group: 10/18
- ◆ Business Issues Committee: 11/08
- ◆ Management Committee: 11/29
- ◆ Board of Directors: 01/08
- ◆ 205 Tariff Filing with FERC: Late January